REMARKS

The Office Action dated March 29, 2004 has been received and carefully noted. The amendments made herein and the following remarks are submitted as a full and complete response thereto.

As a preliminary matter, Applicants appreciate the indication of allowable subject matter in claim 6.

Claims 1-6 have been amended. Part of the amendments has amended "the" to -- said -- for stylistic purpose only and does not narrow or change the character of the claims.

Applicants submit that the amendments made herein are fully supported in the specification and the drawings as originally filed, and therefore no new matter has been added. Accordingly, claims 1-6 are pending in the present application and respectfully submitted for reconsideration.

Claim 1 was rejected under 35 U.S.C. §102(b) as being anticipated by Hwang et al. (U.S. Patent No. 5,777,491). Applicants respectfully submit that claim 1 recites subject matter that is neither disclosed nor suggested by the cited prior art.

Claim 1 recites a semiconductor device having data lines and a drive circuit that drives the data lines. The drive circuit drives the data lines in a selected one of a dynamic operation mode and a static operation mode that is selected in response to a control signal. In other words, the data lines are driven in a dynamic operation mode at one moment and in a static operation mode at the other moment. One of the dynamic operation mode and the static operation mode is selectable in a single and same

construction. As such, the present invention results in the advantage of having a circuit for driving signals with a reduced configuration thereby reducing the chip area occupied by the circuit.

It is respectfully submitted that the prior art fails to disclose or suggest the elements of the Applicants' invention as set forth in claim 1, and therefore fails to provide the advantage which are provided by the present application.

Hwang et al. discloses electronic circuits that are designed to operate in either the static mode or the dynamic mode (column 1, lines 61-63). For instance, Fig. 1, Fig. 3, Fig. 12 and Fig. 14 of Hwang et al. disclose electronic circuits that are designed to operate in the static mode. Fig. 2, Fig. 4, Fig. 13 and Fig. 15 of Hwang et al. disclose electronic circuits that are designed to operate in the dynamic mode. Thus Hwang et al. discloses, as one construction, electronic circuits that are designed to operate in the static mode, and as another separate construction, electronic circuits that are designed to operate in the dynamic mode. In Hwang et al., only one of the dynamic operation mode and the static operation mode is operable in a single construction.

Therefore, Hwang et al. fails to disclose or suggest at least the "drive circuit" that drives "the data lines in a selected one of the dynamic operation mode and the static operation mode that is selected in response to a control signal" as recited in claim 1 of the present invention. Accordingly, Applicants respectfully submit that Hwang et al. fails to disclose or suggest the elements recited in claim 1 of the present invention, and therefore claim 1 is allowable.

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as being anticipated by Hsieh et al. (U.S. Patent No. 4,878,101). Applicants respectfully submit that claim 1 recites subject matter that is neither disclosed nor suggested by the cited prior art.

Hsieh et al. discloses a read sequence (Fig. 6A) of EEPROM that has a dynamic array (Fig. 5). In the read sequence, "all bit lines have been precharged" (column 6, line 16). Thereafter, "cells which have been previously erased ... will discharge their associated bit lines" (column 6, lines 30-32), and "cells which have been previously programmed ... will not significantly discharge their associated bit lines" (column 6, lines 33-35). Thus, the read sequence disclosed in Hsieh et al. is a dynamic operation for the dynamic array. Hence, the sentence in Hsieh et al. that "static operation, in which no precharging of the selected bit lines is performed, is also possible" (column 6, lines 20-22) merely means that a static operation would be also possible if a static array were alternatively used in place of the dynamic array disclosed in Fig. 5 of Hsieh et al. Thus Hsieh et al. discloses, as one construction, EEPROM that has a dynamic operation, and as another construction, EEPROM that has a static operation. In Hsieh et al., only one of the dynamic operation and the static operation is operable in a single construction.

Therefore, Hsieh et al. also fails to disclose or suggest at least the "drive circuit" that drives "the data lines in a selected one of the dynamic operation mode and the static operation mode that is selected in response to a control signal", as recited in claim 1 of the present invention. Accordingly, Applicants respectfully submit that Hsieh et al. fails to disclose or suggest the elements recited in claim 1 of the present invention, and therefore claim 1 is allowable. As for claim 2, it is submitted that claim 2 is dependent on claim 1. As such, claim 2 is allowable due to its dependency on allowable claim 1.

Claims 1 and 2 were rejected under 35 U.S.C. §102(b) as being anticipated by Kuo (U.S. Patent No. 4,766,473). Applicants respectfully submit that claim 1 recites subject matter that is neither disclosed nor suggested by the cited prior art.

Kuo discloses a read sequence (Fig. 7A) of EEPROM that has a dynamic array (Fig. 6). In the read sequence, "all of the bit lines have been precharged" (column 5, line 61). Thereafter, "cells which have been previously erased ... will discharge their associated bit lines" (column 6, lines 7-10), and "cells which have been previously programmed ... will not significantly discharge their associated bit lines" (column 6, lines 11-13). Thus, the read sequence disclosed in Kuo is a dynamic operation for the dynamic array. Hence, the sentence in Kuo that "static operation, in which no precharging of the selected bit lines is performed, is also possible at the cost of increased access time" (column 5, lines 66-68) merely means that a static operation would be also possible if a static array were alternatively used in place of the dynamic array disclosed in Fig. 6 of Kuo. Thus Kuo discloses, as one construction, EEPROM that has a dynamic operation, and as another construction, EEPROM that has a static operation. In Kuo, only one of the dynamic operation and the static operation is operable in a single construction.

Therefore, Kuo fails to disclose or suggest at least the "drive circuit" that drives "the data lines in a selected one of the dynamic operation mode and the static operation mode that is selected in response to a control signal" as recited in claim 1 of the present invention. Accordingly, Applicants respectfully submit that Kuo fails to disclose or suggest the elements recited in claim 1 of the present invention, and therefore claim 1 is

allowable. As for claim 2, it is submitted that claim 2 is dependent on claim 1. As such, claim 2 is allowable due to its dependency on allowable claim 1.

Claims 3-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hsieh et al. (U.S. Patent No. 4,878,101) in view of Furutani et al. (U.S. Patent No. 5,305,261).

Applicants respectfully submit that claims 3-5 are dependent on claim 1. As such, claims 3-5 are allowable due to their dependency on claim 1, which is allowable for the reasons discussed above.

Claims 3-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kuo (U.S. Patent No. 4,766,473) in view of Furutani et al. (U.S. Patent No. 5,305,261).

Applicants respectfully submit that claims 3-5 are dependent on claim 1. As such, claims 3-5 are allowable due to their dependency on claim 1, which is allowable for the reasons discussed above.

Claims 2-5 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hwang et al. (U.S. Patent No. 5,777,491) in view of Furutani et al. (U.S. Patent No. 5,305,261).

Applicants respectfully submit that claims 2-5 are dependent on claim 1. As such, claims 2-5 are allowable due to their dependency on claim 1, which is allowable for the reasons discussed above.

Conclusion

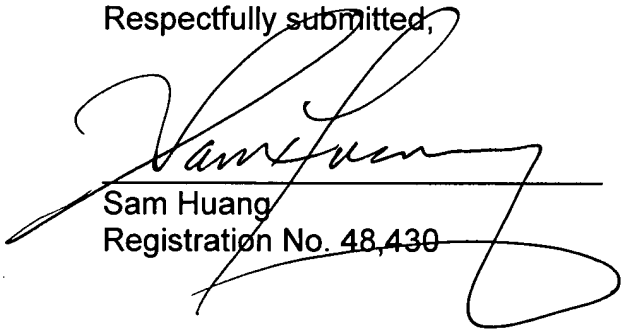
Applicants' amendments and remarks have clearly overcome the rejections set forth in the Office Action dated March 29, 2004. Applicants' remarks have distinguished

claims 1-5 from each of Hwang, Hsieh and Kuo, and thus overcome the rejection of these claims under 35 U.S.C. §102(b) and §103(a). Accordingly, claims 1-6 are in condition for allowance. Therefore, Applicants respectfully request reconsideration and allowance of claims 1-6.

Applicants submit that the application is in condition for allowance. If the Examiner believes that the application is not in condition for allowance, Applicants respectfully request that the Examiner contact the undersigned attorney by telephone, if it is believed that such contact will expedite the prosecution of the application.

In the even that this paper is not considered to be timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, referencing attorney docket number 108397-00096.

Respectfully submitted,



Sam Huang
Registration No. 48,430

Customer No. 004372
ARENT FOX PLLC
1050 Connecticut Avenue, N.W.,
Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810

SH/JY

TECH/248637.1